

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number
WO 2005/007049 A1

(51) International Patent Classification⁷: A61F 11/04,
A61N 1/36

(21) International Application Number:
PCT/GR2004/000035

(22) International Filing Date: 21 June 2004 (21.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
20030100301 16 July 2003 (16.07.2003) GR

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(71) Applicant and

(72) Inventor: KIRATZIDIS, Trifon [GR/GR]; 8 Pasteur St.,
GR-591 00 Veria (GR).

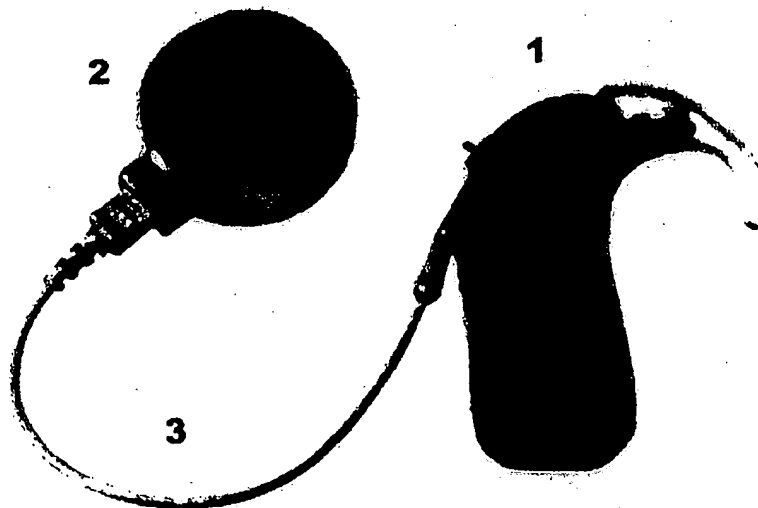
Published:

— with international search report

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: BEHIND-THE-EAR SPEECH PROCESSOR FOR COCHLEAR IMPLANT SYSTEMS



(57) Abstract: Behind-the-ear (BTE) speech processor for cochlear implant systems, which is constructed in such a way that it constitutes a single mechanical unit (drawing 6). The unit is composed of a single shell, which contains the microphone (drawing 7.1), the electronic processor (EP) (drawing 7.2), the inductive transmission coil (ITC) (drawing 7.3), the fixing magnet (drawing 7.5), the batteries or accumulators (drawing 7.6), the control buttons and switches (drawing 7.7), the external connections socket (drawing 7.8) and the embedded fixing hook (FH) (drawing 7.4), that overall constitute a one-piece system, without any mobile parts. Hence, the BTE consists of only one piece or section, without a separate ITC or cables. In order to position this single-piece BTE speech processor (SPBTE), a fixing hook that fits around the auricle and a magnet that fits on the magnet of the CI is used. Its combined double fixation and the absence of any cable are the main advantages of the invention, which ensure easy of use, freedom of body movement and no damages due to cable wear and tear.

WO 2005/007049 A1

BEST AVAILABLE COPY